BINMASTER

Taking Control . . .To A Higher Level

Compact*Pro* Capacitance Sensor 230VAC

1.0 INSTALLATION

1.1 Location and Mounting

1.2

The probe should be located out of the direct flow of material. The Compact*Pro* is designed to mount utilizing a 1" NPS.

Grounding

An equipment grounding connection (earth ground) must be supplied to the unit for safety and to insure proper operation of the unit. The Compact*Pro* uses earth ground as a reference for calibration and detecting a covered or uncovered condition. A ground reference conductor is integrated within the probe allowing operation of the unit in non-metallic vessels. Installation in a grounded metallic vessel will in some cases provide enhanced sensitivity.

1.3 Input Power and Field Wiring

The Compact*Pro* operates from 230 VAC. Field wiring should conform to all national and local electrical codes. Terminals for the input power are labeled on the circuit board; L for the 230 volt hot wire, N for the neutral wire, and G for the safety ground wire. Recommended wire size is 18 or 16 AWG.

Note: The terminals are unpluggable to facilitate wiring. Hold down on the circuit board transformer when pulling up on the terminals to unplug them.

2.0 FAIL-SAFE SELECTION

2.1 Description

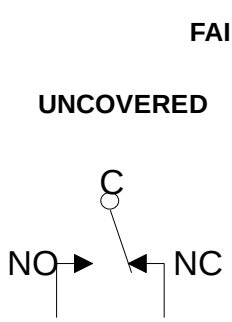
Fail-Safe means that the relay contact positions are set up so that in the event of a power failure the relay will de-energize to a condition that is deemed safe for the application.

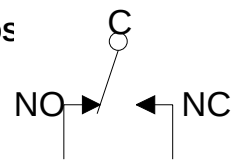
2.2 Fail-Safe High

Fail-Safe High means that the relay will be energized when the probe is uncovered and will de-energize when the probe is covered. In this mode, a power failure will cause the relay contacts to indicate that the probe is covered.

FAIL SAFE HIGH RELAY CONTACT POS

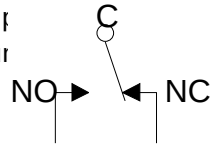
UNCOVERED



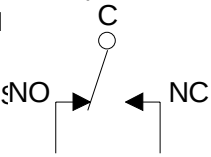


2.3 Fail-Safe Low

Fail-Safe Low means that the relay will be de-energized when the probe is uncovered and will energize when the p n this mode, a power failure will ontacts to indicate that the probe is ur



-E LOW RELAY CONTACT POS



UNCOVERED COVERED

3.0 CALIBRATION

A multi-turn CALIBRATE control is used to compensate for the capacitance of the empty vessel and to set up the desired sensitivity. A tool for adjusting the control is provided on the inside of the lid of the Compact*Pro*. When finished, return the tool to its clip in the lid for future use.

3.1 Calibration Verification

Following calibration, the sensitivity setting that you have set in should be checked by verifying that the Compact*Pro* senses a covered probe condition with your material.

3.2 Calibration Procedure

Probe must be uncovered and material at least 2 feet away from probe.

1. If the COVERED indicator light is OFF, turn the CALIBRATE control counter clockwise (CCW) until the indicator turns ON. If the COVERED indicator is ON proceed with step 2.

2. Turn the CALIBRATE control slowly clockwise (CW) to the point where the COVERED indicator just turns OFF. Now continue to turn the control clockwise (CW) to the desired sensitivity setting.

		Material Dielectric Constant
HIGH sensitivity:	1/8 to 1/2 turn	3 or less
MEDIUM sensitivity:	1/2 to 1 turn	3 to 6
LOW sensitivity:	1 turn or more	6 or more

4.0 RELAY TIME DELAY

The Compact*Pro* has a single turn control for adjusting the time delay from approximately 1 to 30 seconds. This is a time delay for the output relay to change states after a covered or uncovered condition is sensed. The COVERED indicator light will immediately respond to a change in covered or uncovered condition regardless of the time delay setting.

Minimum time delay:	1 second	DELAY control full counter clockwise, CCW.
Maximum time delay:	30 seconds	DELAY control full clockwise, CW.

5.0 LIMITED WARANTY

The manufacturer warrants this equipment for one (1) year according to the following terms:

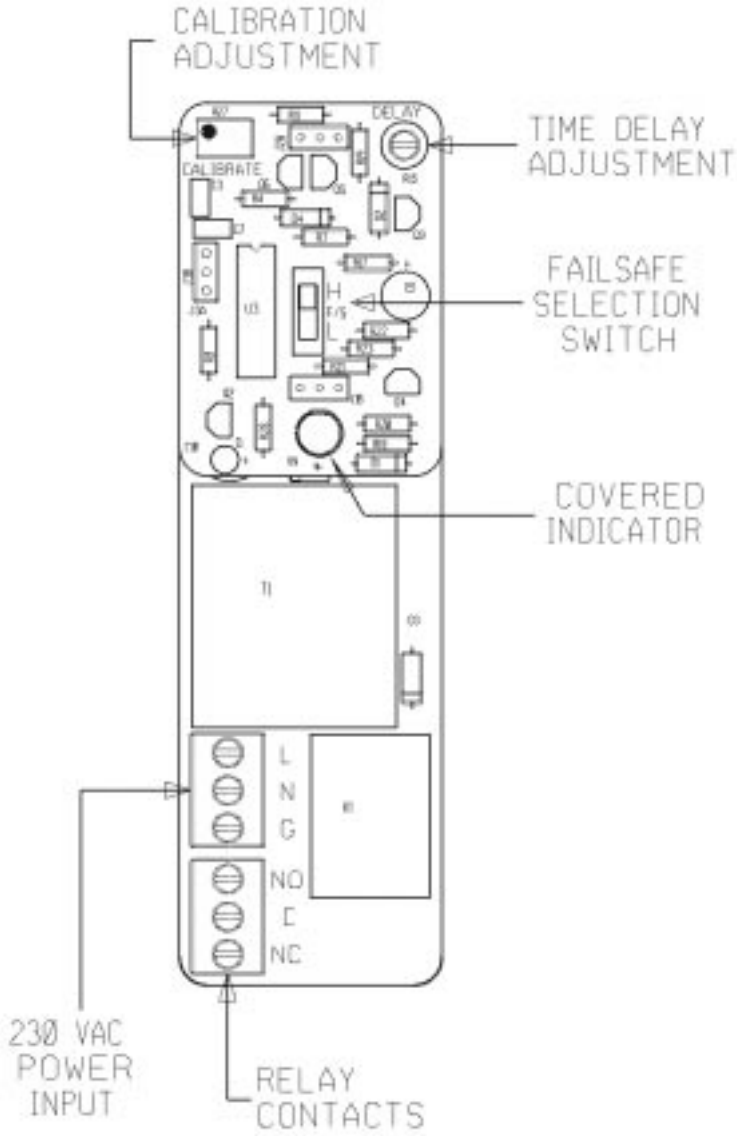
1. This warranty extends to the original purchaser only and commences on the date of original purchase.

2. The manufacturer will repair or replace any part of this equipment found defective, provided such part is delivered prepaid, to the factory. cost of material and labor to repair or replace and does not includ

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3. This warranty shall not apply been tampered with, altered, subject to misuse, neglect or accident. to repairs made necessary by normal wear.

4. This warranty is in lieu of all other warranties, expressed or implied.



Compact*Pro 230 VAC*

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